

*centric* Theory (that which places the centre of the celestial motions in the Sun) had a claim to assent so decidedly superior to the Geocentric Theory, which places the Earth in the centre? What is the basis of the heliocentric theory?—That the *relative* motions are *the same*, on that and on the other supposition. So far, therefore, the two hypotheses are exactly on the same footing. But, it is urged, on the heliocentric side we have the advantage of simplicity:—true; but we have, on the other side, the testimony of our senses; that is, the geocentric doctrine (which asserts that the Earth rests and the heavenly bodies move) is the obvious and spontaneous interpretation of the appearances. Both these arguments, *simplicity* on the one side, and *obviousness* on the other, are vague, and we may venture to say, both indecisive. We cannot establish any strong preponderance of probability in favor of the former doctrine, without going much further into the arguments of the question.

Nor, when we speak of the superior *simplicity* of the Copernican theory, must we forget, that though this theory has undoubtedly, in this respect, a great advantage over the Ptolemaic, yet that the Copernican system itself is very complex, when it undertakes to account, as the Ptolemaic did, for the *Inequalities* of the Motions of the sun, moon, and planets; and, that in the hands of Copernicus, it retained a large share of the eccentrics and epicycles of its predecessor, and, in some parts, with increased machinery. The heliocentric theory, without these appendages, would not approach the Ptolemaic, in the accurate explanation of facts; and as those who had placed the sun in the centre had never, till the time of Copernicus, shown how the inequalities were to be explained on that supposition, we may assert that after the promulgation of the theory of eccentrics and epicycles on the geocentric hypothesis, there was no *published* heliocentric theory which could bear a comparison with that hypothesis.

It is true, that all the contrivances of epicycles, and the like, by which the geocentric hypothesis was made to represent the phenomena, were susceptible of an easy adaptation to a heliocentric method, *when a good mathematician had once proposed to himself the problem*: and this was precisely what Copernicus undertook and executed. But, till the appearance of his work, the heliocentric system had never come before the world except as a hasty and imperfect hypothesis; which bore a favorable comparison with the phenomena, so long as their general features only were known; but which had been completely thrown into the shade by the labor and intelligence bestowed upon